

ELM STREET SLUICeway

HAER No. NH-25

Retaining wall beneath Elm Street,
approximately 100 feet north of the
intersection of Elm and Main streets
Claremont
Sullivan County
New Hampshire

HAER
NH
10-CLAR,
21-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD

National Park Service
Northeast Region
Philadelphia Support Office
U.S. Custom House
200 Chestnut Street
Philadelphia, P.A. 19106

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LOCATION: Retaining wall beneath Elm Street, approximately 100 feet north of the intersection of Elm and Main streets, Claremont, Sullivan County, New Hampshire.

USGS Mt. Ascutney, New Hampshire Quadrangle,
Universal Transverse Mercator Coordinates:
18.714980.4805720

ENGINEER/BUILDER: Asa Meacham, first owner

DATE OF CONSTRUCTION: Circa 1813

PRESENT OWNER: New Hampshire Department of Transportation (NHDOT)

PRESENT USE: Abandoned sluiceway

SIGNIFICANCE: The Elm Street Sluiceway is a representative example of a stone-lined millrace or sluice, typical of nineteenth-century mill construction in New England and elsewhere. The sluiceway is associated with early mill developments along the Sugar River in Claremont, New Hampshire.

PROJECT INFORMATION: The Elm Street Sluiceway was recorded in 1995 by the Cultural Resource Group of Louis Berger & Associates, Inc., East Orange, New Jersey, for NHDOT. The recordation was undertaken pursuant to a Memorandum of Agreement between the Federal Highway Administration and the New Hampshire State Historic Preservation Officer executed in association with the planned replacement of the Main Street Bridge, Claremont, New Hampshire. Project personnel included Richard M. Casella, Senior Architectural Historian, and Rob Tucher, Photographer.

DESCRIPTION

The Elm Street Sluiceway consists of the first 20 feet of a nineteenth-century stone-lined millrace, the remainder of which has been filled. The 16-foot-wide opening is located in a rubble stone retaining wall which supports Elm Street along the north side of the Sugar River, in Claremont, New Hampshire. In the early twentieth century, possibly during construction of the Main Street Bridge in 1915, a reinforced concrete slab bridge was cast in place over the sluiceway. An 8-foot-high concrete wall extends across the front of the opening and rests on the slate bedrock of the riverbed. This wall is fitted with a six-inch gate valve at its base to allow drainage of any water which may accumulate. Another concrete wall extending the full height of the sluice is located 20 feet into the sluiceway under the roadway. This wall was placed to permanently seal the sluice and serve as a retaining wall for fill.

HISTORICAL INFORMATION

The origin of the Elm Street Sluiceway, also known as the Elm Street Cut, dates to 1813, when a dam at "fall privilege No. 5" was first built. Asa Meacham erected what is believed to have been the first woolen mill in Sullivan County on the parcel of land just west of the existing sluiceway opening. A wooden dam provided power for the "Old Meacham Factory," located on the northern side of the Sugar River (geographically west), and the Tyler gristmill, located on the southern side of the river. The Tyler Mill and its water privileges were sold to the Sugar River Mill Company in 1854, which erected a three-story brick grist mill. This mill is still standing at the corner of Main and River streets, across the river from the Elm Street Sluiceway (Ide 1879:18).

Over the years, Meacham rented space in his wood-frame mill to a variety of manufacturers of woolen goods. By 1851, Meacham's mill had changed hands, and was known as "Earl's Woolen Mill." At that time, two other industrial concerns were tapping the waterpower provided by the Elm Street Cut. After powering Earl's Mill, the water traveled south in the open "cut," or race, running under Main Street, to turn the wheel of Stoddard's Stone Mill. The cut continued southwest about 1,000 feet to Duncklee's Stone Shop, where a small dam impounded the water for his use. After leaving Duncklee's shop, the water reentered the Sugar River just below Dam No. 7 (Walling 1851).

In 1854, much of Earl's Mill was destroyed by fire. Simeon Ide bought the two remaining buildings, fitted them with updated waterwheels, and rented the space to machinery manufacturers. Ide erected a round fireproof brick building on the site in 1859, and operated a printing and bookbinding business until its economic failure in 1874 (Ide 1879:19).

In 1875, the woodworking company of Freeman and O'Neil purchased Ide's property and erected a new wood-frame workshop fronting on Main Street. The building was built over the

Elm Street Cut and equipped with a Tyler waterwheel. By 1884, the firm had expanded operations and added a Mr. Tilden to the company name. The rear portion of the property with the round brick building was either sold or rented to J.R. Barney, who converted it to a shoddy mill. By the turn of the century, Barney was bought out by W.H. Slack, who intended to greatly expand the flock manufacturing operation. Slack bought all of the land and buildings of both Barney's Shoddy Mill and the now-defunct Freeman, O'Neill and Tilden woodworks. It appears from the 1899 map that the downstream industrial uses of the Elm Street Cut were no longer in operation, and the cut may have been partially or mostly filled (Ide 1879:19; Sanborn Map Company 1894, 1899, 1904).

In 1915, Slack sold his flock company to the newly incorporated Claremont Waste Manufacturing Company, headed by A.C. Bowman, president, and F. Steinfeld, vice president. The firm manufactured cotton and wool flocks, wool and burlap bags, and wool waste, and took over ownership and rights to Dam No. 5 and the Elm Street Sluiceway. The new Main Street Bridge also was erected in 1915, and it is likely that the concrete slab bridge on Elm Street that spans the sluiceway was constructed at that time (*Claremont Daily Eagle* 1964:72).

In 1919, the waterpower sources on the Sugar River were inspected by B.L. Bigwood for the United States Geological Survey. The timber crib dam was found to be in good condition, providing a 15-foot head of water. The Claremont Waste Manufacturing Company took in water through the stone-lined flume running under Elm Street to power a 30-inch and a 36-inch wheel for the cutting of flock. The existing concrete slab bridge over the sluice was in place at that time. As operations continued to expand, Claremont Waste found the water supply inadequate to meet their needs and gradually converted to electric motor power. By 1924, the water entering the sluice was used only for process water, and the "cut" south of Main Street was being filled. The inlet was partially blocked with a concrete wall when the dam was repaired in 1936. In 1968, the dam was completely removed by the Claremont Waste Company (Bigwood 1919; New Hampshire Water Resources Board 1939).

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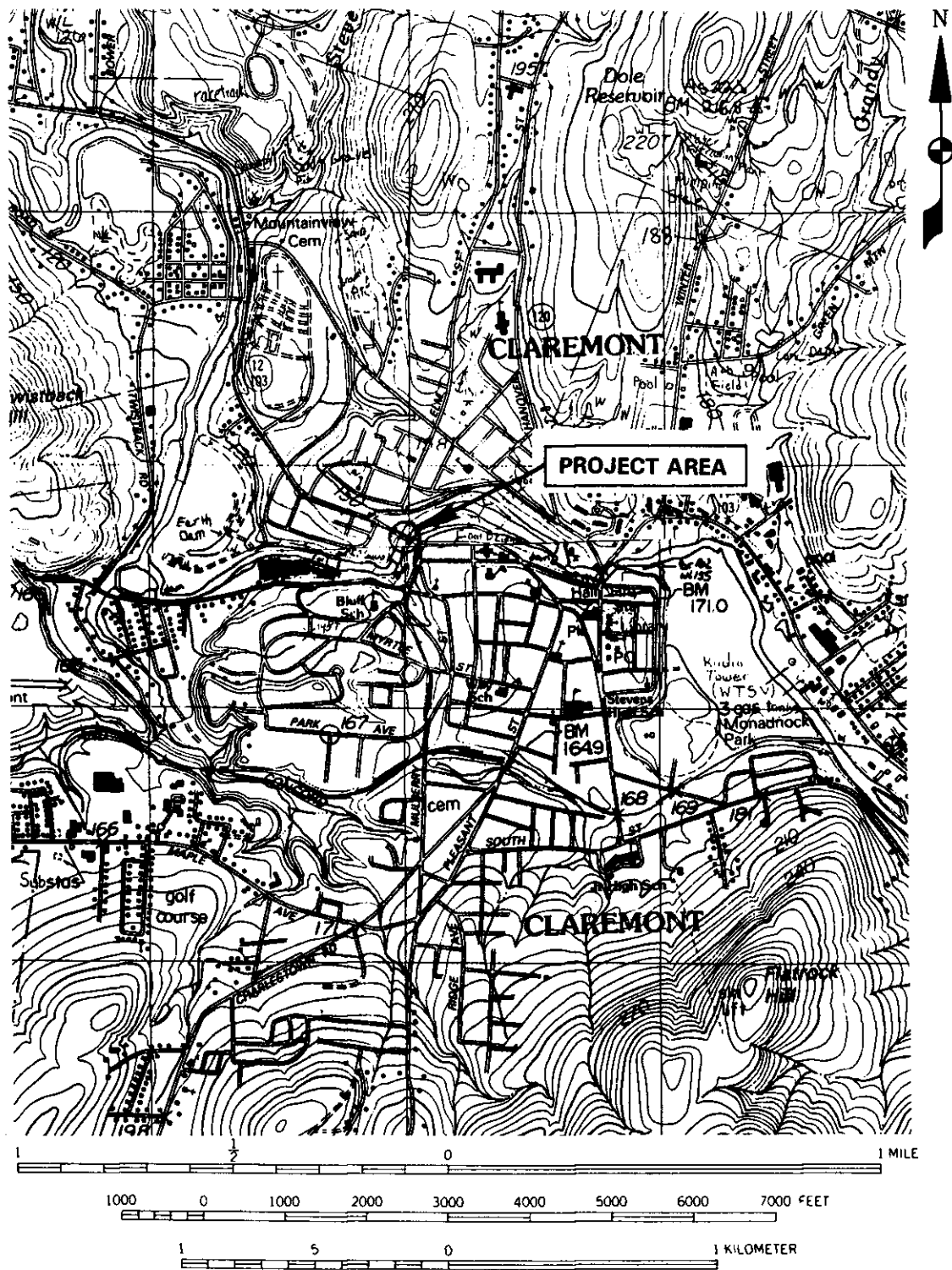
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Location Map

SOURCE: USGS 7.5 Minute Quadrangles, Mt. Ascutney, NH and Springfield, VT

